

Amendments to the Claims

Claims 1-8 (Cancelled)

Claim 9 (Currently Amended) A method for rapid data flow allocation in a point to point network ~~where the parameters $p(t)$ influencing data flow allocation are changeable,~~ said network having data paths and ~~plurality of node elements[;], and having a~~ dynamically variable set of parameters of collective value $p(t)$ at a given time t , such that a measure of goodness of a given data flow allocation is a function of $p(t)$, comprising:

- acquiring network information including node location, length and available paths;
- computing sample points of ~~the maximum revenue flows for some interested and fixed parameters~~ specified values of the parameters;
- ~~construction of the~~ constructing an approximate maximum-flow-frontier (MFF) utilizing the computed sample points; and
- obtaining ~~the~~ an updated market parameter vector $p(t)$ as a function of time (t), and applying piece-wise linear approximation to construct an updated approximate MFF from parameter vector $p(t)$.

Claim 10 (Original) The method recited in claim 9 wherein the step of computing sample points is done off-line utilizing linear programming techniques.

Claim 11 (Currently Amended) The method recited in claim 9 wherein the step of constructing the ~~maximum~~ MFF is done off-line utilizing linear programming techniques.

Claim 12 (Original) The method recited in claim 9 wherein said parameter $p(t)$ is price.

Claim 13 (Original) The method recited in claim 9 further including the step of tracking the maximum value of parameter $p(t)$ as it varies with time through the reconstruction of the approximate MFF.

Claim 14 (Original) The method recited in claim 9 wherein the step of constructing utilizes polynomials of order greater than one.

Claim 15 (Original) The method recited in claim 9 wherein the applying step involves adjusting and reallocating flows while the parameter vector $\mathbf{p}(t)$ changes such that the actual MFF is realized.

Claim 16 (Currently Amended) The method recited in claim 15 wherein the flow is adjusted to the point on the ~~AMFF~~ approximate MFF which is perpendicular to the parameter $\mathbf{p}(t)$ vector.

Claim 17 (Original) The method recited in claim 9 further including a step of checking for network expansion which restarts the process at the acquiring step.

Claim 18 (Original) The method recited in claim 9 further including a step of checking for reconfiguration needs within the network which restarts the process at the acquiring step.

Claim 19 (Currently Amended) The method recited in claim 9 wherein the acquiring, computing and ~~construction~~ constructing steps are done off-line, and the obtaining and applying steps are done on-line.